From: John Hawks
To: Microsoft ATR
Date: 1/23/02 12:46pm
Subject: Microsoft Settlement

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Microsoft Antitrust Comments
c/o Antitrust Division
U.S. Department of Justice
601 D Street NW
Washington, DC 20530-0001

Dear Sir or Madam:

I am writing as a public comment to the proposed settlement in the case
of U.S. v. Microsoft. As a background, I am employed by the University
of Utah and currently work as a research scientist in paleoanthropology.
I would like to comment on the settlement in terms of its effect on me
as a consumer and as a researcher working with public funds. In brief,
the proposed agreement does not address several distinct areas in which
the illegal extension of Microsoft's operating systems monopoly harms
the public interest.

One of the largest research expenditures both by universities and by
individual researchers using NSF or NIH monies is computer-related
technology. Currently, much of the public money spent by researchers is
wasted on Microsoft products that are never used. Here in my laboratory,
there are five copies of Microsoft Windows software that are sitting
unopened and unused. These are software that "came with" the computers
that we use in the lab, but that we do not use and have never used.
However, Microsoft has agreements with many systems vendors to package a
copy of Microsoft Windows with every computer sold, regardless of
whether the customer wants it or not. Even if the customer requests that
Microsoft Windows not be included with the computer, the manufacturer is
still required by agreement to pay Microsoft for a copy of the software
for that computer. Manufacturers do not provide discounts for systems
that lack Windows. Other Microsoft software, such as Microsoft Office,
is also often included by manufacturers under agreement to Microsoft,
again whether the customer wants it or not.

For my own use, and in cases in the laboratory where I have the choice,
I build my own computers from components, thus avoiding the unnecessary
expenditure on unused Microsoft products. However, most universities,
including mine and the University of Michigan where I formerly worked,
have purchasing agreements with computer manufacturers, providing
discounts for volume purchases, where individual computers may be
requested by many different departments during the year. Small
manufacturers exist who do not require the unnecessary purchase of
Microsoft products, but the large manufacturers able to supply the needs
of a research university are also the ones most likely to have exclusive
agreements with Microsoft. Thus, universities using public money and
individual researchers inside those universities are predominantly
forced to purchase Microsoft products, whether they are wanted or not.
The retail cost of the Microsoft Windows software, purchased with public
money but unused in my laboratory, is over five hundred dollars. This is
a cost imposed on the public and consumers by Microsoft's illegal
extension of its monopoly.

The proposed settlement does not restrict Microsoft from pursuing
exclusive agreements with systems vendors, and it does not allow any
recourse for consumers or institutions who would like to purchase a
computer from a large systems manufacturer without Microsoft software.
There are many reasons to choose such a manufacturer instead of a
smaller shop, including availability of support, rapid replacement of
defective units, and volume discounts. However, consumer choice in this
matter is limited by the illegal licensing used by Microsoft. I would
propose that the agreement be extended to forbid these contracts, so
that any consumer may choose to purchase a system without Microsoft
software.

Instead of Microsoft products in my laboratory and home, I use Linux, a
free operating system alternative. Again, there are reasons why a
consumer would choose to use a Microsoft product instead of Linux

despite its zero price, including ease of use and availability of software titles. I would not expect Microsoft to provide applications software on other platforms to erode its monopoly, as some might propose. However, one aspect of Microsoft's operating systems strategy stands out as harmful to consumers, and an illegal extension to its monopoly power. This aspect is the creation and spread of proprietary standards and file formats.

Users who create content with Microsoft products often use the software to create digital copies of the content with Microsoft's proprietary formats. For example, users of Microsoft Word save documents in ".doc" format. The encoding scheme used by such formats is secret and undocumented by Microsoft. Users who wish to use other software packages will be unable to read the complete content of documents created with Microsoft software in this way. Nevertheless, the monopoly of Microsoft has allowed it to make its proprietary file formats into de facto standards, so that many companies and universities use ".doc" format for internal correspondence, for example. This extension of monopoly power to file formats has inhibited the adoption of non-Microsoft operating systems like Linux, because no Microsoft applications product exists on that operating system to perfectly read Microsoft file formats. It has been reported that abuse of file formats may be more widespread, with applications like the web-document producing FrontPage producing content for public use that can only be interpreted by Microsoft Internet Explorer, for example, and not by alternative products like Netscape Navigator. Microsoft changes these proprietary formats with almost every new release, so that users are forced to upgrade their software in order to continue to interchange documents with other users. All of this inhibits the use of non-Microsoft operating systems and applications.

Further, Microsoft has attempted to extend proprietary standards to public operational systems, such as networking protocols and interoperability software including Java. Indeed, after Sun corporation brought suit against Microsoft for illegally creating its own proprietary version of Java, Microsoft changed its interoperability strategy to a new proprietary standard that it controls. If left to extend its monopoly in this way, Microsoft will limit the ability of alternative operating systems like Linux to interact with public applications, including internet banking and secure transactions of all kinds. The public standards now used as the basis of the Internet were developed largely with public money and are free for anyone to use. If Microsoft is allowed to extend its operating systems monopoly to public Internet standards, it will limit the ability of other operating systems to use public networks.

What is worse, it will also put the security of all public computers at unnecessary risk. Public standards are free for anyone to inspect, so that security problems may be circumenvented and no secret features are available to be exploited by criminals. In contrast, Microsoft's proprietary standards are secret, so that people of malicious intent can exploit secret holes to invade computer systems, causing millions of dollars in damages. No operating system platform is immune to security violations. However, in my laboratory, having five computers with continuous Internet connections, it would be a serious security risk to use Microsoft software instead of Linux. Even if the content of my computers was left unharmed by those who would break into them, they could install malicious software without my knowledge that could be used to attack computer systems elsewhere. We saw this happen many times to companies and universities using Microsoft products last year. Further, my computers cannot be affected by e-mail and macro viruses that attack users of Microsoft Outlook and Microsoft Word through attachments with the ".doc" format. In short, the extension of proprietary formats creates an unnecessary security risk, which I cannot afford in my laboratory, and the U.S. cannot afford in the current war.

Finally, it is possible to alter operating systems like Linux to run Microsoft applications, or other applications written for the Microsoft

Windows operating system, without needing the Windows software to be purchased or installed. This alternative provides a good compromise for many people, who wish to use products available only for the Windows platform, but do not wish to risk the security holes or other problems with Windows itself. However, this kind of interoperability is inhibited by the proprietary secret format that Microsoft uses to allow applications to interact with its operating system. It is necessary for applications to use undocumented features of the operating system to be useful, but no non-Microsoft implementation of these undocumented features is possible without breaking Microsoft confidentiality agreements.

I would propose that the settlement be extended to force Microsoft to publicly release the standards used to create its file formats, networking protocols, applications frameworks, and operating system toolkits. If the details of these proprietary standards were publicly available, it would be possible for programmers outside of Microsoft to provide secure implementations of public interfaces such as networking protocols. It would also be possible to write programs that could read content created by Microsoft software, and to extend other operating systems to run software configured for Windows. The proposed settlement allows for people external to Microsoft to inspect some of these proprietary standards, but it does not make the standards public. The difference is that a public standard can be implemented without fear of violating a Microsoft copyright and can be inspected by anyone who uses or wants to use Microsoft products, while a standard merely open to inspection may make any public implementation vulnerable to a lawsuit. As it stands, the agreement may allow it to continue to be impossible for a person saving his or her crucial documents with Microsoft's ".doc" format to even know how those documents are encoded, or to be able to recover those documents if the user should later choose to use non-Microsoft products instead.

Without minimally these alterations, the settlement does not address the problems I find in my work with Microsoft's operating systems monopoly. This makes the proposed settlement a failure in addressing the harm that Microsoft has done to consumers by the illegal extension of its monopoly. I hope that the settlement will be altered to address these concerns.

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http://www.prehistory.net/hawks.html